There I Was... in the Congo

The night mission in support of a U.S. Army Special Forces A-Team south of Qandahar Airport went like most missions we had flown the previous two months, albeit a little more interesting. We hit Al Qaeda and Taliban targets at night in a final push against the Taliban stronghold near the Qandahar airport. It wasn't exactly a 1+30 night bomb-smoke mission.

A series of elements, including our own, were tasked to destroy buildings that the ground FAC said were occupied by enemy forces. To keep the night more interesting, we saw random bursts of anti-aircraft artillery and small arms come at us from various positions around the airport. While we were confident the surface fire was not a threat, it did raise our adrenaline level. Since any surface fire, no matter how ineffective, was highly unusual, the mission already was more memorable than most. It looked like it would be a good story to banter about over mid-rats. I didn't realize how much higher my adrenaline level could go.

We had launched before midnight as a section from the Operation Enduring Freedom CVOAs and headed north, through Pakistan, to hit our front-side USAF heavy tanker. The weather wasn't terrible, but it wasn't good, either. We were occasionally in and out of the clouds, as we rendezvoused on the tanker. Tonight, a small consolation was that the tanker was a centerline drogue KC-10A, so there wouldn't be any "dancin' with the maiden" in the clouds.

After completing our front-side tanking, we headed to a contact point and switched to ground FAC. A section of Tomcats were servicing targets near the airport, so we climbed and held over the target area to waiting our turn to employ our weapons. We got the general target descriptions from the ground FAC and worked into a racetrack pattern with the Tomcats so we could expend our weapons in the shortest time. While we had enough gas at the time, the distances involved with the campaign required quite a bit of time sweating fuel. After three times around the racetrack, I guided my last weapon to hit a building and came around in a left turn, on goggles, to pick up my wingman as he completed his last run.

My wingman guided his last weapon and quickly picked up a visual of me as I came around in an arcing turn north of him. He just had called visual, and I was switching from the ground FAC frequency to the command-and-control net when I heard the dreaded, "Engine right,

Photo by Cpl. Kurt Fredrickson.

engine right," aural caution. I looked down to the DDI and discovered an R AMAD PR caution.

The first thing that occurred to me was, "Oh, great. I really needed this." Before I saw the caution, I had heard the warning and had brought the right throttle to idle. The caution went away on the DDI for about two seconds and then came back on. I said something to my wingman to indicate I had an engine problem.

Simultaneously, I tried to dig out my PCL from where it was buried in my helmet bag with CamelBaks, crackers, piddle packs, evasion charts, and NVG cases. The PCL confirmed what I suspected about the caution: I needed to secure the right generator, and, if there was more than 30 minutes before landing, I needed to secure the right engine. NATOPS directs this action because operations longer than 30 minutes will lead to an AMAD fire. Since I was more than 500 miles from the ship or nearest divert, I had much more than 30 minutes before landing. I didn't know how long the AMAD was going to stay together, so I needed to get gas and get out of country. I had less than 6,000 pounds of gas and still was more than 200 miles inside Afghanistan.

With a number of different elements in country, more than the usual amount of comm was on the AWACS frequency. I tried several times to get their attention. Finally, I came up and said, "Look, I've got a motor coming apart on me. I need a tanker, and I need to get out of country."

That phrase got attention. The AWACS identified the closest available tanker—thankfully, it was another KC-10—and gave me a vector. I switched my wingman to the tanker's boom frequency to coordinate our vectors and to expedite the join-up. I told him of my intention to get the motor secured within 30 minutes. My logic was if NATOPS said to leave it running if landing within 30 minutes, I could leave it turning that long to get gas. I didn't think I could stay in the basket of a heavy tanker at high altitude with only one engine turning. I planned to use the 30 minutes of allocated engine-run time with the caution to get gas and leave hostile territory.

We picked up radar SA to the tanker at the location passed by the AWACS, and dialed up his air-to-air TACAN. With only one generator left online, I had to secure the radar, but I wanted to wait until the joinup with my tanker. I identified the target as a KC-10 and asked him to turn to

the south, toward Pakistan, as we joined. He said he was heading south. My target, however, still tracked north, five miles away from us. I could see the KC-10 silhouette on the goggles.

AWACS asked me which tanker I wanted to join. Alarms started going off when I looked to see that the air-to-air TACAN showed almost 20 miles of separation. I had locked up the wrong tanker. The one I had locked had passed his fuel into the tanker I was directed to join, because his Navy drogue had failed. I had heard a discussion on the frequency about a consolidation between the two KC-10s after our front-side tanking but didn't remember it until now. They had been separating from each other when I got radar SA, and I tracked the wrong one. I realized my mistake and asked AWACS for another vector to my tanker, then turned back to the south. I asked the tanker to do a 360 to help us join.

Once we were joined, I asked the KC-10 to slow as much as feasible. Based upon their weight, they could make about 220 knots. As I approached the basket, almost 25 minutes had passed since the caution had first appeared. The right engine was at idle for almost all of that time. I extended the probe and plugged into the basket. I tried tanking with the left engine at military and the right throttle off the idle stops as required. I really couldn't stay in the basket with that plan, so we asked the tanker to descend to 17,000 feet. I wanted to see if my jet would perform better at that altitude.

At this point, we were almost in Pakistan and not concerned with the surface-to-air threat. Once we descended, I was able to stay in the basket with almost no power on the right. I topped off, backed out of the basket, and secured the right engine. It had been just over 30 minutes since we had come off target, and I had had the caution.

As my wingman topped-off, I started crunching fuel figures to see if we could make it home without more fuel. We coordinated with the E-2C, running the picture in the south, to recover one cycle early and figured we wouldn't need more gas. I had left my probe extended when I shut down the right engine, in case more gas was needed. With the right motor secured, I would not have the hyd 2 system that normally extends the fuel probe. Rather than worry about emergency extending my fuel probe if I needed to refuel again, I decided to leave it extended.

Fuel was not transferring out of the external tanks. It finally dawned on me that the external fuel couldn't transfer because the tanks were depressurized with the probe extended. I cranked the right engine for a few seconds just to retract the probe so I could transfer my external fuel. I would not need to tank again before the recovery. (After looking at the NATOPS Manual when we got back, I discovered I could have transferred my external fuel with the IFR probe extended and the right engine secured, if I had selected ORIDE on the external-fuel-tank control panel. This option did not occur to us.)

An hour later, I restarted the right engine at six miles and made an uneventful recovery aboard the ship. An O-ring on the right engine AMAD gearbox had failed, causing it to lose 108 of the 114 ounces of oil. Not more than a few minutes of flight time were left on the right engine before an AMAD fire likely would have occurred. The 30 minutes of flying time NATOPS prescribes turned out to be good gouge.

While not really deviating from NATOPS, we tried to apply some of that "sound judgment …may require modification of the procedures" line from the preface of the manual. Trying to understand the "why" behind several of the emergency procedures enabled us to come up with a game plan for solving the problem.

We normally don't have this much time to spend dealing with emergencies. Most of us think about knocking off the tactical problem and coming home if an emergency occurs. At worst, perhaps, we consider having to coordinate for a pull forward from the ship. Being 500 miles from home plate and 200 miles inside enemy territory changed the equation a little.

Talking through the problem with my wingman, leveraging the information in the PCL and our systems knowledge, and using the minimal amount of remaining brain bites enabled us to get the jet safely out of bad-guy territory and back on deck.

Author's name withheld.